

FY 2011 Congressional Budget Request

Environmental Management Office of River Protection

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Office of River Protection
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EM Environmental Management

safety



performance



cleanup



closure

Office of River Protection

Fiscal Year 2011 Focus

- Do Work Safely
- Complete proposed TPA/Consent Decree milestones for Tank Farms and WTP
- Deploy hard-heel SST retrieval technology
- Further C-Farm closure activities
- Complete Recovery Act Tank Farm infrastructure upgrades to prepare reliable/consistent WTP waste feed
- Accelerate completion of WTP engineering, reduce project risk, and improve project confidence
- Achieve 65% WTP total project completion
- Continue to look for opportunities to reduce overall lifecycle costs/project risk
- Collaboratively work with Regulators, Tribes, Stakeholders and Public to further progress
- Finalize Tank Closure and Waste Management EIS for final issuance of ROD



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(x\$1,000)	FY 2009 Original Appropriation	FY2009 ARRA	FY 2010 Appropriation *	FY 2011 Request *
River Protection Budget Summary				
Defense Environmental Cleanup				
Office of River Protection				
<i>Tank Farm Activities</i>	319,943	326,035	408,000	418,000
<i>Waste Treatment and Immobilization Plant*</i>				
01-D-16A: Low Activity Waste Facility(LAW)	160,000	-	100,000	57,500
01-D-16B: Analytical Laboratory(LAB)	65,000	-	55,000	2,500
01-D-16C: Balance of Facilities(BOF)	75,000	-	50,000	5,000
01-D-16D: High Level Waste Facility(HLW)	125,000	-	160,000	260,178
01-D-16E: Pretreatment Facility(PT)	265,000	-	325,000	415,000
Total, Waste Treatment and Immobilization Plant	690,000	-	690,000	740,178
Total, Office of River Protection	1,009,943	326,035	1,098,000	1,158,178

* 2 control points – One for PT and one for LAW, LAB, BOF, and HLW



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FY 2011 Planned Accomplishments

Tank Farms - \$418M PBS ORP-0014

Base Operations

- DST/SST operations, surveillance, monitoring and maintenance
- 222-S Laboratory operations
- Conduct 242-A Evaporator campaign
- Conduct seven DST to DST transfers
- Tank sampling and analysis
- Conduct DST ultrasonic testing and DST system integrity program
- Continue implementing SST Integrity Expert Panel recommendations (i.e., SST structural analysis and visual inspections)

Base Operations

- Facility Management
- WTP electricity
- Business Services
- Hanford pension
- Site Services



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Tank Farms - \$418M PBS ORP-0014

Bulk Retrieval Activities

- Complete C-107 bulk retrieval (deployment of MARS)
- Complete C-112 design and construction
- Complete C-101 design and initiate construction
- Initiate design on C-102 and C-105

Hard Heel Activities

- Complete C-108 and C-110 hard heel removal
- Complete C-109 hard heel design and construction

Other Retrieval Activities

- Complete procurement of 2nd Mobile Arm Retrieval System
- Remove ~ 6 hose-in-hose transfer lines
- Design SX Farm Interim Surface Barrier
- Continue tank closure demonstration activities



MARS



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FY 2011 Planned Accomplishments

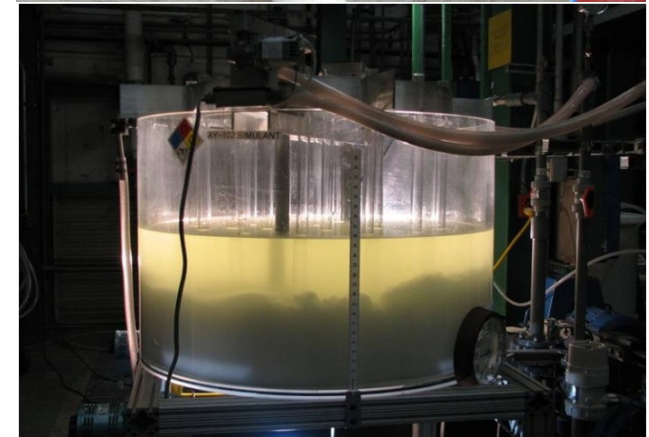
Tank Farms - \$418M PBS ORP-0014

Waste Treatment and Immobilization Support

- Design SY-102 feed delivery system
- Design AY/AZ vent upgrade
- Continue Secondary Waste Treatment/Effluent Treatment Facility upgrade design

Technology Development and Deployment

- Continue to develop
 - Next generation melter
 - Lithium Bayer Pretreatment technologies for sodium mitigation



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FY 2011 Planned Accomplishments

Waste Treatment and Immobilization Plant (WTP) - \$740.178M

PBS ORP-0060

LAW - 77% complete (currently 68%)- \$57.5M

- Complete 100% pipe fabrication isometrics/80% bulk process pipe installation
- Receive off gas mercury adsorber
- Receive liquid CO2 storage horizontal vessel

LAB – 56% complete (currently 48%) – \$2.5M

- Receive two HEPA filter housings for the hot cell
- Install 90% bulk process pipe and 70% bulk conduit
- Construct the waste collection tank pit

BOF – 59% complete (currently 52%) - \$5M

- Construct Water Treatment Building which supplies de-mineralized water for numerous critical processes
- Complete construction of BOF Switchgear Building
- Procure last major BOF equipment - emergency diesel generators
- Receive two ammonia vessels



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Waste Treatment and Immobilization Plant (WTP) - \$740.178M (continued)

PBS ORP-0060

HLW – 65% complete (currently 49%) - \$260.178M

- Complete 90% design
- Receive HEPA filter housings/dampers for primary ventilation system
- Complete 50 walls/slabs at 14' to 37' elevation
- Install HEPA filter housings in filter cave
- Install stainless steel liners for 2 melter cells



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FY 2011 Planned Accomplishments

Waste Treatment and Immobilization Plant (WTP) - \$740.178M (continued) PBS ORP-0060

PT – 63% complete (currently 48%)- \$415M

- Complete 90% design
- Complete installation of structural steel framing to support roofing at 98' elevation
- Complete placement of slabs at 77' elevation, except a handful of cell tops (required to stay open for future vessel installation)
- Complete installation of all primary ventilation ducts below 56' elevation
- Install 30 ton crane/shield doors for hot cell
- Place 1st major fabricated piping module in black cell above large waste feed receipt vessel



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American Recovery and Reinvestment Act Work FY 2011 Planned Accomplishments

	FY09	FY10	FY11	Total
FY09 ARRA Appropriation	\$26M	\$180M	\$120M	\$326M

RA-1 Tank Farms Infrastructure Upgrades

- Design/fabricate upgraded AP/SY ventilation systems
- Complete SY electrical upgrades for future waste feed delivery demands
- Complete AP farm level rise modification increasing DST storage space (528,000 gallons)
- Design/install upgraded AZ farm ventilation control system
- Remove SST obsolete electrical infrastructure

RA-2 Other Infrastructure Upgrades

- Wiped Film Evaporator full-scale demo
- Procure/test MARS vacuum

RA-3 Facilities Upgrades

- Complete 222-S Laboratory upgrades
- Complete 242-A Evaporator upgrades

RA-4 Waste Feed Infrastructure Upgrades

- Upgrade/automate DST control system
- Complete AZ-1 condensate line upgrades
- Complete in-tank mixer pump design
- Remove DST obsolete equipment

RA-5 Waste Feed Transfer Line Upgrades

- Replace 8 RCRA non-compliant transfer lines in SY Farm



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